

The Texas Company

Beaverton Area - Oregon

Cooper Mountain #1

25

1-3

2-W

Will.

WORK DONE BY TEXAS COMPANY LABOR AND EQUIPMENT

1945

10/27 Spudded in at 5:00 P.M. w/ a 24" Smith bit.

0'	40'	Drilled	Clay.
40'	50'	"	Gravel.
50'	100'	"	Basalt.
100'	114'	"	Basalt and Clay.
114'	113'	"	Clay and Gravel.

10/28 Started reaming 24" hole from bottom of conductor pipe. Reamed approximately 50' when sub broke off in top of drill collar. Left 1 drill collar, bit, stabilizer, and 2 subs in hole at approximately 40'. Recovered fish O.K.

10/29 Reamed to bottom (113') w/ 24" bit. Ran 3 joints, 121', 20" O.D., 54# new casing w/ Baker Float Shoe, and cemented at 117' K.B. w/ 100 sax Pac. Portland Const. Cement. (Halliburton Cmt. Equipment). Top wooden plug bumped. Final Pressure 100#. Landed casing and installed Blowout Preventer.

10/30 Ran in w/ 17" Hughes Hole Opener and drilled out cement plug.

118'	128'	Drilled	<u>Basalt</u>
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Changed to a 12 1/4" Hughes Tricone bit.

128'	141'	Drilled	<u>Basalt.</u>
141'	166'	"	Basalt and Clay.
166'	168'	"	Basalt.
168'	244'	"	Basalt w/ Streaks of Clay.
244'	310'	"	Basalt.
310'	338'	"	Brown Clay.
338'	343'	"	Basalt and Clay.

Lost circulation at 343', lost approx. 80 bbls. of mud. Mixed and pumped in hole approx. 100 bbls. of thick mud and regained circulation. Total mud lost 180 bbls.

343'	366'	Drilled	<u>Basalt w/ Clay Streaks.</u>
366'	375'	"	Basalt.

11/2 Lost circulation at midnight, mixed heavy mud, added Fibertex, pumped in hole very slowly. No returns. Lost approx. 100# mud.

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11/2

Drilled while pumping mud in hole, made 3'.

375'

378'

Drilled

Basalt.

Plugged hole with 150 sax Pac. Portland "Beaver" Const. Cement pumped in through open-end D.P. hung at 374'.

11/3

Installed B.O.P. Equipment.

11/4

Ran in w/ 12 1/2" Hughes Rock bit. Found top of cement at 300'. D.O. cement 300'-378'.

378'  
405'  
412'  
440'  
540'  
558'  
570'

405'  
412'  
440'  
540'  
558'  
570'

Drilled  
"  
"  
"  
"  
"

Basalt.  
Clay.  
Shale.  
Basalt  
Brown Clay.  
Basalt and Clay.

11/6

Lost circulation at 570' at 2:30 P.M. Mud loss, 33 bbls. Added sawdust and 5 bales Fibertex. Regained circulation at 7 P.M. Lost approx. 50 bbls. mud. Total mud lost 83 bbls.

570'

668'

Drilled

Basalt.

11/8

Lost circulation at 668', mixed mud and sawdust, regained circulation O.K. Lost approximately 46 bbls. mud.

668'

762'

Drilled

Basalt.

11/11

Reamed from 708' to 762'.

762'

773'

Drilled

Basalt.

Reamed from 700' to 773'.

773'

791'

Drilled

Basalt.

Reamed from 770' to 791'.

791'

853'

Drilled

Basalt.

Reamed from 800' to 853'.

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853' 886' Drilled Basalt.

11/14/45 Lost circ. at 10:30, regained at 12 A.M. Lost approximately 115 bbls. mud. Lost circulation at 2 P.M., lost approximately 70 bbls. mud. Total 185 bbls. Pumped in 150 max Pac. Port. Beaver Const. Cement through D.P. hung at 834'.

11/15-11/18 Ran in w/ 17 1/2" H. C. Smith Hole Opener. Started reaming at 20" shoe - 117'. Reamed 12 1/2" hole to 17 1/2" from 117' to 265'. Changed to 12 1/4" Hughes bit, hit reamer guide at 265'. Chased piece of "Guide" down in 12 1/4" hole to 358'. Changed to 17 1/2" Security Hole Opener. Reamed 12 1/4" hole out to 17 1/2" from 265' to 353'. Made three runs with "grab" for fish. No success. Ran in w/ Hughes bit and circ. and cond. mdd. P.O.

11/19 Ran in w/ grab and recovered fish at 673'. Ran in w/ 12 1/4" Hughes bit. Found top of cement at 673'. D.O. to bottom 886', cement firm all way down.

886' 981' Drilled Basalt.

11/21 Changed to a 9-5/8" Elliott Wire Line Core Barrel.

981' 986' Core #1

Changed to a 12 1/4" Hughes bit and reamed 9-5/8" hole to 12 1/4" from 981' to 986'.

986' 1072' Drilled Basalt.

11/23 Ran 9-5/8" Elliott W. L. drag head and cored ahead.

1072' 1129' Cores #2 to #6

11/23 Ran 17 1/2" Security Hole Opener and Security 3-pt. Reamer and reamed down 8 1/2" rathole from 353'-599'. Twisted off while reaming leaving 4 D.C., subs, and reamers in the hole. Ran Bowen Overshot and recovered fish. Resumed reaming operations with 17 1/2" Security Hole Opener and Reamer. Reamed to 663'.

11/27 Lost circulation while cleaning out hole with 12 1/4" Hughes Tricone Bit. Stuck pipe at 810' while pulling out of the hole. Mixed fresh mud, sawdust, and bentonite and pumped down in pills. Worked drill pipe. Could not regain circulation.

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- 11/30 Shot drill pipe at tool joint with Ford Alexander "String Shot" at approx. 671'. Left 1 single, drill collars, subs, and 12 1/4" bit in the hole. Ran in to 660' with 17 1/2" bit and circulated at top of fish.
- 12/2 Made up and ran in with 9-5/8" O.D. Wash-Over pipe. Washed over fish to 813' and lost circulation. Regained circulation by adding sawdust and bentonite to mud. Pulled out and ran in Bowen Overshot with Baash Ross Safety Joint and McCullough Jars. Took hold of fish and worked pipe until fish came loose. Laid down fish and ran in with 17 1/2" Security Hole Opener and 17" 3-pt. reamer. Reamed rat hole from 663' to 745'. Twisted off drill collars while reaming, leaving 1 drill collar, subs, reamer, and hole opener in hole. Recovered fish with Bowen Overshot on 4 1/2" drill pipe.
- 12/3
- 12/16 Resumed reaming operations using 17 1/2" Reed Hole Opener and 17" Security 3-pt. Reamer. Lost circulation while reaming at 870'. Mixed ground bark, Flo-seal, sawdust, and bentonite into mud to regain circulation. Lost circulation again while reaming at 942'. Added sawdust and bentonite to mud and regained circulation. Continued reaming. Reamed out to bottom at 1129'.
- 12/16 Ran 28 joints, 1132.92' overall, of 13-3/8", 54.5#, J-55, Youngstown, T & G 8 rd. thd. Seamless casing and cemented at 1128' K.B. with 800 sacks Golden Gate Construction Cement using Halliburton Power Equip. Started cementing at 8:37 P.M. Displaced cement with 942 cu. ft. mud leaving an estimated 50' bridge in casing. Used one top wooden plug only. M.T. 55 minutes, P.T. 5 minutes, D.T. 48 minutes, T.T. 1 hour 48 minutes. Lost circulation after displacing an estimated 250 sack cement out of the shoe. Did not regain same. Estimated slurry density 118#/c.f.
- 12/18 Filled to surface between 13-3/8" casing and 20" conductor pipe using a total of 450 sack of Golden Gate Construction Cement pumped in through 2" E.U. tubing with a 1" tubing stinger hung along the outside of the 13-3/8" casing. Landed casing and installed Blowout Prevention Equipment. Tested same to 1000# pressure. Held O.K. for 30 minutes.
- 12/19 Located top of the hard cement at 965'. Drilled out cement to 1129'. Drilled ahead in 12 1/4" hole to 1133'. Changed drilling mud and pulled out of hole to core.
- 1129' 1133' Drilled Shale.

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#7  
 12/20/45 Ran in with 9-5/8" Elliott Wire Line Core Barrel on 4 1/2" Hydril drill pipe and cored from 1133'-1145'. Lost circulation while coring at 1139'. Mixed mud and sawdust to regain partial circulation.

#8  
 12/21 Cored from 1145'-1151' without circulation using a 9-5/8" bit. Pulled out with the Elliott core barrel. Ran in with a 9-7/8" rock bit to check fluid level on the drill pipe. Fluid standing at 475' from the surface. Mixed more bentonite and sawdust. Reamed out 9-5/8" core hole from 1133'-1151' without circulation. Drilled ahead to 1168'.

12/22 Pulled out of hole to cement. Ran back in with 4 1/2" open-end drill pipe to 1165' K.B. and plugged hole with 50 sax Golden Gate Const. Cement using Halliburton Cementing Equipment. Displaced cement with 53 cu. ft. water to equalize at an estimated 1087'. M.T. 4 min., D.T. 3 min., T.T. 7 min. Approx. slurry density 120#/C.F. Located top of cement plug at 1141'. Recemented with 50 sax Golden Gate Construction Cement pumped in through open-end drill pipe hung at 1133'. Displaced cement with 53 cu. ft. water. M.T. 4 minutes, D.T. 2 minutes, T.T. 6 minutes. Added approx. 5% bentonite to cement while mixing.

12/23 Found top of set cement at 1115'. Drilled out cement to 1165' with normal circulation. Not losing any mud. Drilling ahead in a 9-7/8" hole.

1168' 1279' Drilled Conglomerate.  
 1279' 1361' " Conglomerate w/ Silty Stks.

12/24 Ran in w/ 8 1/2" Elliott Wire Line Core Barrel and changed mud. Lost circulation while changing mud. Pulled out of hole.

12/25 Plugged hole with 50 sax Sun Construction Cement mixed with approx. 10% Wyoming Bentonite and pumped in through open-end drill pipe hanging at 1165' K.B. Displaced cement with 63 cu. ft. of water. Fluid level in hole standing at 300'. Did not have circulation while cementing. Halliburton Cementing Equipment. M.T. 4 minutes, D.T. 4 minutes, T.T. 8 minutes.

Located top of firm cement at 1150'. Pulled up to 1139' and re-cemented with 50 sax Sun Construction Cement mixed with approx. 10% Bentonite. Displaced cement w/ 63 cu. ft. water. M.T. 4 min. D.T. 3 min., T.T. 7 min.

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12/25/45  
(contd)

Located top of cement plug at 1132'. Recemented with 25 sax Sun Construction Cement pumped in through open-end drill pipe hung at 1130'. Disolaced with water to equalize.

12/26 Located top of cement at 1130'. Drilled out cement to 1166'. Lost approx. 22 bbl. mud while circulating at 1184' to condition mud. Added sawdust to mud to regain full circulation. Cleaned out hole to bottom (1361'). Ran back in with 9-5/8" core barrel and cored ahead.

1361' 1376' Core #9

Resumed drilling with 9-7/8" rock bit.

1376' 1430' Drilled Hard Khale and Sandy Shale.

12/27 Cored with 9-5/8" Elliott Wire Line Core Barrel.

1430' 1450' Core #10

Ran in with 9-7/8" rock bit and resumed drilling after reaming down rathole. Changed rotary mud while drilling at 1527'.

1450' 1552' Drilled Silty Shale.  
1552' 1594' " Sandy Shale.

12/28 Lost approx. 24 bbls. rotary mud since changing mud. Added sawdust to mud to regain full circulation. Ran in with 9-5/8" Elliott Core Barrel.

1594' 1614' Core #11

Reamed down rathole and resumed drilling with 9-7/8" rock bit.

1614' 1791' Drilled Sand and Silt.  
1791' 1980' " Sand and Shale.

12/29 Ran in w/ 9-5/8" Elliott Wire Line Core Barrel.

1980' 2000' Core #12

Reamed down rathole and resumed drilling 9-7/8" hole.

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2000'	2130'	Drilled	Sandy Shale.
2130'	2192'	"	Sand and Shale.

12/20 Ran in with 8 1/2" Elliott Wire Line Core Barrel.

2192'	2204'	Core #13
2204'	2209'	Core #14

Reamed down rathole and resumed drilling 9-7/8" hole.

2209'	2435'	Drilled	Shale and Silt.
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12/31 Ran in with 8 1/2" Elliott Wire Line Core Barrel.

2435'	2447'	Core #15
2447'	2457'	Core #16
2457'	2467'	Core #17
2467'	2477'	Core #18
2477'	2488'	Core #19
2488'	2498'	Core #20
2498'	2508'	Core #21

Ran Schlumberger Electrical Logging Instrument. Reamed down rathole and resumed drilling 9-7/8" hole.

2508'	2619'	Drilled	Sand.
2619'	2707'	"	Sand and Shale.
2707'	2744'	"	Sand.

1/1/46 Ran Schlumberger electrical logging instrument. Ran in hole with 8 1/2" Elliott Wire Line Core Barrel.

2744'	2754'	Core #22
2754'	2764'	Core #23
2764'	2775'	Core #24

1/2/46 Ran Schlumberger electrical logging instrument. Ran in 8 1/2" Elliott Wire Line Core Barrel.

2775'	2784'	Core #25
2784'	2796'	Core #26
2796'	2808'	Core #27

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2808'	2821'	Core #28
2821'	2833'	Core #29
2833'	2845'	Core #30

1/3/46 Reamed down 8 1/2" rathole from 2744' to 2790' with 9-7/8" bit. Cleaned out rathole from 2790'-2845' preparatory to making test. Ran Halliburton Open-Hole Formation Tester with 8" O.D. Straight Sidewall Packer on 4 1/2" Hydril drill pipe. McCullough Jars. 1/2" bean in tool. No cushion. 48' of 4 1/2" tail pipe below packer, including 24' of approx. 100 Mesh torch out perforations and 24' of blank on bottom. Set tail pipe on bottom at 2845'. Packer at 2793'. Opened valve at 8:55 P.M. One very faint puff blow at surface - dead thereafter. Closed valve and reopened. No perceptible blow at surface for duration of test. Valve open 20 minutes. Fulled packer loose at 9:15 P.M. Recovered 35' of normal drilling fluid above valve. No free water. Clocks in pressure stopped when valve opened.

1/4 Ran back in hole with 8 1/2" bit to clean out rathole preparatory to retesting. Lost circulation while conditioning mud on bottom. Pulled out of hole and ran back in with open-end drill pipe. Plugged hole with 175 sax Sun Construction Cement followed with 50 sax Cal-Seal "60 minute" Quick Setting Cement pumped in through open-end drill pipe hung at 1108'. Packed off drill pipe with Regan B.O.P. Formation broke down and took fluid at 200# pressure. Displaced cement with total of 95 cu. ft. of water to clear drill pipe. Cementing pressure 200#. Displacement pressure 200-400# F.P. Started mixing cement at 10:02 P.M. Mixed 175 sax construction cement in 13 minutes and 50 sax Cal-Seal in 6 minutes. Displaced in 8 minutes, TIT. 27 minutes.

1/5 Located top of set cement at 1140'. Drilled out cement from 1140'-1200'. Cleaned out hole to 1311' and changed mud in upper portion of hole. Reamed out 8 1/2" rathole with 9-7/8" and resumed drilling.

2845' 3139' Drilled Streaks of Sand and Shale.

1/6 Ran in with 8 1/2" Elliott Wire Line Core Barrel.

3139'	3150'	Core #31
3150'	3158'	Core #32
3158'	3170'	Core #33
3170'	3180'	Core #34

1/7/46 Reamed out 8 1/2" rathole and resumed drilling 9-7/8" hole.

*Handwritten initials*



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3180' 3310' Drilled Sand and Shale.

1/8/46 Ran in w/ 8½" Elliott Wire Line Core Barrel.

3310' 3321' Core #35  
3321' 3333' Core #36

Cleaned out bridges in hole and reamed out rathole. Resumed drilling.

3333' 3340' Drilled Hard Sand.  
3340' 3403' " Hard Shale.  
3403' 3483' " Shale and Ash  
3483' 3500' " Hard Shale.

1/10 Ran in with 8½" Elliott Wire Line Core Barrel.

3500' 3512' Core #37  
3512' 3524' Core #38  
3524' 3534' Core #39

1/11 Ran Schlumberger electrical logging instrument. Ran Halliburton Open-Hole Formation Tester with 8" O.D. straight sidewall packer on 4½" Hydril drill pipe. McCullough Jars above. No cushion used. ½" bean in tools. 27' of tail pipe below packer, including 16' of approx. 100 Mesh torch-cut perforations and two inside pressure recorders. Set tester on bottom (3534'). Packer at 3505'. Valve opened at 4:26 P.M. There was a light steady blow immediately at surface that lasted for duration of test. Closed valve at 4:56 P.M. Tester open total 30 minutes. Recovered 312' of fluid in the drill pipe of which the top 20' was rotary mud and the bottom 292' was muddy salt water testing 3350 G/G. Pressure recorders indicated the tester was open for the duration of the test.

1/12 Cleaned out bridges in hole with 9-7/8" bit and reamed down rathole to bottom. Resumed drilling.

3534' 3625' Drilled Sand.

Ran in hole with 8½" Elliott Wire Line Core Barrel.

3625' 3637' Core #40  
3637' 3649' Core #41  
3649' 3657' Drilled.

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3657' 3668' Core #42  
 3668' 3680' Core #43

1/14/46 Changed entire system from clay base rotary mud to weighted, preservative Hydrolized Starch mud due to the inability to control the mud's physical properties resulting from salt water contamination.

1/15 Cleaned out hole and reamed down 8½" rathole with 9-7/8" bit.

3680' 3772' Drilled Silty Shale.  
 3772' 3790' " Silt.

1/17 Ran in with 8½" Elliott Wire Line Core Barrel.

3790' 3794' Core #44

1/18 Reamed down rathole and resumed drilling 9-7/8" hole.

3794' 3819' Drilled Silt.  
 3819' 3894' " Tough Shale.  
 3894' 4205' " Hard Shale.  
 4205' 4215' " Hard Shale and Volcanic Ash.  
 4215' 4247' " Hard Shale.

1/22 Ran in with 8½" Elliott Wire Line Core Barrel.

4247' 4258' Core #45  
 4258' 4268' Core #46  
 4268' 4278' Core #47  
 4278' 4290' Core #48

1/23 Reamed down 8½" rathole and resumed drilling with 9-7/8" bit.

4290' 4404' Drilled Hard Shale.

1/24 Ran in with 8½" Elliott Wire Line Core Barrel.

4404' 4411' Core #49  
 4411' 4414' Core #50

Reamed down rathole and drilled ahead with 9-7/8" bit.

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4414' 4490' Drilled Hard Shale.

1/25/46 Ran in with 8 $\frac{1}{2}$ " Elliott Wire Line Core Barrel.

4490' 4501' Core #51  
4501' 4511' Core #52

1/26 Reamed down rathole and resumed drilling with 9-7/8" bit.

4511' 4720' Drilled Hard Shale.

1/28 Ran Schlumberger electrical logging instrument. Ran in hole with 8 $\frac{1}{2}$ " Elliott Wire Line Core Barrel.

4720' 4732' Core #53  
4732' 4740' Core #54  
4740' 4744' Core #55

1/29 Reamed down rathole and resumed drilling with 9-7/8" bit.

4744' 4906' Drilled Hard Shale.

1/30 Ran in with 8 $\frac{1}{2}$ " Elliott Wire Line Core Barrel.

4906' 4918' Core #56  
4918' 4930' Core #57  
4930' 4938' Core #58  
4938' 4948' Core #59

2/1/46 Rotary mud started to ferment. Went completely bad in 4 hours. Restored mud by chemical treatment and replacing 50% of the system with new mud. Conditioned mud system to bottom.

2/4 Reamed down rathole and drilled ahead with 9-7/8" bit.

4948' 5087' Drilled Hard Shale.

2/6 Ran in with 8 $\frac{1}{2}$ " Elliott Wire Line Core Barrel.

5087' 5099' Core #60  
5099' 5111' Core #61  
5111' 5123' Core #62

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Reamed down 8 $\frac{1}{2}$ " core hole and resumed drilling with 9-7/8" bit.

5123'	5266'	Drilled	Hard Shale.
5266'	5271'	"	Ash.

2/10 Ran in with 8 $\frac{1}{2}$ " Elliott Wire Line Core Barrel.

5271'	5283'	Core #63
5283'	5293'	Core #64
5293'	5310'	Core #65

Reamed down rathole and drilled ahead with 9-7/8" bit.

5310'	5587'	Drilled	Hard Shale.
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2/15 Ran in with 8 $\frac{1}{2}$ " Elliott Wire Line Core Barrel.

5587'	5599'	Core #66
5599'	5611'	Core #67

Reamed down 8 $\frac{1}{2}$ " core hole and drilled ahead with 9-7/8" bit.

5611'	5754'	Drilled	Hard Shale.
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2/17 Ran in with 8 $\frac{1}{2}$ " Elliott Wire Line Core Barrel. Cleaned out bridges in the hole with center bit and cored ahead.

5754'	5766'	Core #68
5766'	5778'	Core #69
5778'	5787'	Core #70
5787'	5797'	Core #71

2/18 Ran in with 9-7/8" bit and reamed down rathole to bottom. Ran Schlumberger electrical logging instrument and sidewall sampler. Ran back in hole with 8 $\frac{1}{2}$ " Elliott Wire Line Core Barrel.

5797'	5809'	Core #72
5809'	5819'	Core #73
5819'	5829'	Core #74

2/19 Ran Schlumberger Sidewall Sampling Gun. Ran in with 9-7/8" bit and reamed down rathole to bottom. Drilled ahead.

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- 5829' 6159' Drilled Hard Shale.
- 2/25/46 Ran Halliburton Hole Caliper. Measured in the hole with the drill pipe. Found 5' error in measurements. Corrected depth - 6164'. Drilled ahead with 9-7/8" bit.
- 6164' 6223' Drilled Hard Shale.
- 2/26 Ran Schlumberger Electrical logging instrument. Ran back in with 9-7/8" bit and drilled ahead.
- 6223' 6255' Drilled Hard Shale.
- 2/27 Ran Schlumberger electrical logging instrument and sidewall sampler. Drilled ahead with 9-7/8" rock bit.
- 6255' 7167' Drilled Hard Shale.
- 3/14/46 Lost circulation while conditioning mud preparatory to running electrical log. Pulled out of hole and ran Schlumberger electrical logging instrument. Ran in hole with open-end drill pipe to 1098' and pumped in 100 barrels of mud with no returns. Conditioned 150 bbls. mud by adding sawdust and strip cellophane and pumped down the hole.
- 3/15 Regained circulation. Packed off around drill pipe at surface by closing the Regan B.O.P. and squeezed away 300 sax Golden Gate Construction Cement. Formation broke down and took fluid at 200# (surface pressure). Treated cement with approx. 1% Bentonite. Started mixing at 1:19 A.M. Displaced cement with 95 cu. ft. of mud leaving approx. 35' of cement in the 13-3/8" casing. Pressure built up 100# while displacing. Opened bleeder and bled back approximately 2 cu. ft. of mud. M.T. 25 min., D.T. 16 min., T.T. 41 min. Finished cementing at 2:00 A.M. Located top of set cement at 1081'. Drilled out cement from 1081'-1157'. Conditioned mud and tested cement job by closing Regan B.O.P. at surface and applying 160# pressure at the surface. Cement held pressure for 10 min. without a loss. Conditioned mud to bottom. Mud showed some evidence of fermentation from depth of 6500'. Dumped approx. 64 bbl. and mixed new mud. Conditioned system to 85# weight and drilled ahead with 9-7/8" bit.

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- 7167' 7258' Drilled Hard Shale.
- 3/18 Ran in with 8½" Elliott Wire Line Core Barrel.
- 7258' 7270' Core #76  
7270' 7282' Core #77
- 3/19 Reamed down rathole and drilled ahead with 9-7/8" bit.
- 7282' 7291' Drilled Hard Shale.  
7291' 7299' " Sand.  
7299' 7804' " Hard Shale.
- 3/26 Ran in with 8½" Elliott Wire Line Core Barrel.
- 7804' 7816' Core #78  
7816' 7820' Core #79
- 3/27 Ran Schlumberger electrical logging instrument. Reamed down rathole and drilled ahead with 9-7/8" bit.
- 7820' 7863' Drilled Hard Shale.
- 3/28 Conditioned mud and ran Schlumberger electrical logging instrument. Ran 186 joints, 7888.54' overall, of 7" O.D. 23# & 26# N-80 casing, including 591.87' (14 jts.) of 26# casing on bottom and 43.12' (1 joint) on top. Cemented casing on bottom at 7862' K.B. with 800 sack of Oregon Brand Portland Construction Cement using Halliburton Power Equipment. Used Baker Float Shoe on bottom and Baker Cement Float Collar one joint up from bottom. Used two top wooden plugs, no bottom plug. Started running casing at 6:00 P.M. (3/28/46) and finished running casing at 11:30 A.M. (3/29/46). Installed cementing head and broke circulation at 11:40 A.M. Circulated 45 minutes. Started cementing at 12:25 P.M. Displaced cement with 1731 cu. ft. of mud with the rigs power pump. Plugs bumped. F.P. 1450#. Bled off pressure at the surface but the floats would not hold. Built pressure back up to 1000# and closed in at the surface. M.T. 49 minutes, P.T. 2 minutes, D.T. 35 minutes, T.T. 1 hour, 25 minutes. Average slurry density 116#/c.f. Finished cementing at 1:50 P.M.
- 3/30 Landed the 7" casing and packed off between strings. Laid down 4½" Hydril drill pipe and made up string of 3½" Hydril 13.3#.

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4/3/46 Installed Regan Blowout Preventer and Kerotest Master Gate and tested same to 1500# for 15 minutes without loss. Ran in with 6-1/8" bit and conditioned mud in casing. Located top of cementing plugs at 7812'. Closed Regan B.O.P. and tested same with 700# pressure for 10 minutes. Held O.K.

4/4/46 Drilled out cement from 7812'-7863' and drilled ahead.

7863' 7865' Drilled Hard Shale.

Changed cement and salt water contaminated mud in hole with hole mud in storage tanks. Conditioned mud to 90# weight and drilled ahead with 6-1/8" bit.

7865' 7950' Drilled Hard Shale.

4/6/46 Ran in with 6-1/8" Reed Conventional Core Barrel.

7950' 7967' Core #78

Ran in with 6-1/8" Rock Bit and resumed drilling.

7967' 8349' Drilled Hard Shale.

4/16 Ran Schlumberger electrical logging instrument and T.T.Co. Geophones.

4/17 Ran in with 6-1/8" bit and drilled ahead.

8349' 8520' Drilled Hard Shale.

8520' 8550' " Sticky Shale.

8550' 8557' " Medium Hard Shale.

8557' 8596' " Hard Shale.

4/23 Ran in with 6-1/8" Reed Conventional Core Barrel.

8596' 8607' Core #79

Ran in with 6-1/8" rock bit and drilled ahead.

8607' 8694' Drilled Hard Shale.

4/25 Ran in with 6-1/8" Reed Conventional Core Barrel.

Handwritten initials

## The Texas Company

## Beaverton Area - Oregon

Cooper Mountain #1

25

1-S

2-W

Will.

8694' 8714' Core #80

4/26 Ran in with 6-1/8" Rock Bit and drilled ahead.

8714' 8731' Drilled Hard Sandy Shale.  
8731' 8812' " Hard Shale.

4/27 Ran in with 6-1/8" Reed Conventional Core Barrel.

8812' 8832' Core #81

4/28 Lost one cutter off of Reed Core Barrel Rock Head in the hole. Reran core barrel to try and pick up cutter but did not recover same. Ran Schlumberger electrical logging instrument and sidewall sampler.

4/29 Ran in with 6-1/8" rock bit to drill up cutter and sidetrack. Drilled ahead.

8832' 8891' Drilled Hard Shale.

4/30 Ran in with Reed Conventional Core Barrel.

8891' 8911' Core #85

Drilled ahead with 6-1/8" rock bit.

8911' 9163' Drilled Hard Shale.  
9163' 9203' " Hard Shale and Sand.  
9203' 9247' " Hard Shale.

5/7/46 Ran in with 6-1/8" Reed Conventional Core Barrel.

9247' 9257' Core #86  
9257' 9263' Core #87

5/8/46 Ran Schlumberger electrical logging instrument. Ran Halliburton Casing Tester on 3 1/2" Hydril drill pipe to test interval 7862'-9263'. Set packer in 7" casing at 7820' with 19' tail piece, including 6' of 3 1/2" perforated and 2 pressure recorders extending to 7839'. 3/8" bean. No water cushion. Opened tester valve but packer would not hold. Took 7 bbl. mud to fill hole (equivalent to 940' column of mud inside drill pipe). Reset packer and opened valve at 10:22 P.M.



The Texas Company

Beaverton Area - Oregon

Cooper Mountain #1

25

1-9

2-W

Will.

- 5/8/46 : There was a medium strong, steady blow immediately at surface gradually diminishing to very weak, steady blow in 1½ hours. Mud came to surface in 2 hours 25 minutes (12:47 P.M.) Clean salt water in 5 hours. Closed valve at 4:40 A.M. Well was flowing salt water at 29 bbl./hr. rate. Temperature was 88½ degrees F. Well continued to head frothy salt water for 30 minutes. Entrained bubbles were tested for petroleum gas but were not combustible. Recovered 7831' of salt water in the drill pipe testing 4700 B/G. B.H.F.P. 3700#.
- 5/9 Ran in with open-end 3½" drill pipe to plug bottom of 7" casing. Plugged hole with 20 sax Olympic Brand Hi-Early Cement pumped in through drill pipe hanging at 7882'. Started cementing at 1:49 P.M. Displaced cement with 326 c.f. of mud to equalize. M.T. 2 min., D.T. 35 min., T.T. 37 min. Final displacement pressure 1000#. Approximate slurry density 118#/c.f. Finished cementing at 2:26 P.M. Located top of set cement at 7936'. Recemented hole with 29 sax Construction Cement pumped in through open-end drill pipe hanging at 7882'. Displaced cement with 325 c.f. of mud to equalize. Started cementing at 2:04 P.M. Average mixing pressure 400#. M.T. 2 min., D.T. 34 min., T.T. 36 min. Final displacing pressure 400#. Approximate slurry density 118#/c.f. Finished cementing at 2:40 P.M. Located top of set cement at 7759' after standing 7 hours.
- 5/10
- 5/11 Stripped out Blowout Prevention Equipment and cellar connections. Made up and ran in Baash Ross Spear. Set spear in top of 7" O.D. casing and removed landing slips. Took strain on casing and measured stretch. Ran in hole with Baash Ross Casing Cutter on 3½" drill pipe and cut casing at 4200'. Attempted to pull from that depth but casing would not come. Reran casing cutter and made second cut at 3013'. Reran casing spear and pulled casing from 3013'. Capped stub of 7" casing with 30 sax of "Cal-Seal" 60 minute Quick Setting Cement pumped in through open-end 3½" drill pipe hanging at 3013'. Started mixing cement at 4:46 P.M. Displaced cement with 125 c.f. of mud to equalize. M.T. 3 minutes, D.T. 6 minutes, T.T. 9 minutes. Estimated top of cement plug at 2943' K.B. Finished cementing at 4:55 P.M. Pulled up to shoe of 13-3/8" casing and plugged the hole with 70 sax of "Cal-Seal" Cement pumped in through open-end drill pipe hung at 1148'. Displaced cement with 46 c.f. of mud to equalize. Started mixing at 7:50 P.M., M.T. 6 min., D.T. 4 min., T.T. 10 min. Finished cementing at 8:00 P.M. Located top of set cement at 1034'. Supported full weight of the drill pipe.
- 5/12
- 5/14 Capped surface casing with steel plate and abandoned.

The Texas Company

Beaverton Area - Oregon

Cooper Mt. #1

25

1-S

2-W

Will.

583.2' S & 844.5' W fr E<sub>1</sub> Cor.  
of Sec. 25

XXXXXXXX

767.3

782.6' K.B.

(USGS)

June 18, 1946

W. A. CLARK

T. W. BELL

J. H. PULS

Division Engineer

XXXXX

XXXXXXXXXXXX

October 27, 1945

Abandoned

May 14, 1946

XXXX

9263'

7759'-7882'

2943'(est)-3013'

None

1034'-1148'

(See Geological Dent.

All measurements from K.B.

Files for core record)

ABANDONED

XXXXXXXXXXXXXXXXXXXX

20"	117'	0'	54#	New	Seamless	24"	100
13-3/8"	1128'	0'	54.5#	New	Seamless J-55	17"	800
7"	7862'	0'	23# & 26#	New	Seamless N-80	9-7/8"	800

- 9263'